

[001] ELECTRICAL DRIVE SYSTEM FOR A VEHICLE
WITH SKID STEERING

[002] This application is a national stage completion of PCT/EP2004/009614 filed August 28, 2004 which claims priority from German Application Serial No. 103 44 711.3 filed September 26, 2003.

[003] FIELD OF THE INVENTION

[004] The invention concerns an electrical drive system for a vehicle with a skid steering element according to the generic term of the principal claim.

[005] BACKGROUND OF THE INVENTION

[006] Vehicles with a skid steering element are tracked vehicles or wheeled vehicles in which, while driving along curves, the inner drive chain and/or the inner drive wheels are slowed down in each case opposite the outer drive chain and/or the outer drive wheels. In particular, with heavy tracked vehicles, this requires substantial brake performances on the inner drive chain.

[007] There are well-known different systems, which permit this brake performance being supplied to the outer drive chain. With a mechanical or hydrostatic-mechanical, superimposed, steering gear with a steering gear part and a driving transmission part, as is revealed in DE 38 33 784 A1. For this, a zero-shaft propelled by the steering gear part and the performance exchange from the inner drive chain to the outer drive chain is intended to be made mechanically by the driving transmission part.

[008] DE 100 05 527 A reveals a diesel electric drive system with each of the two chains assigned its own electrical drive system, whereby no mechanical connections exist between them. The power transmission between the left and right side takes place exclusively in an electrical way, what permits a space-favorable arrangement of the drive components. However, it requires an efficient electrical system and high performance electrical drive engines.

[009] EP 0 304 594 A, likewise, shows a diesel electric, drive system which, in addition, exhibits a mechanical superimposed steering gear. For drive and